UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,459	01/26/2000	Peter M. Kilcommons	060531.P002	8553

7590 03/25/2004	EXAMINER
Tarek N Fahmi	MASHAAL, ALI M

Tarek N Fahmi
Blakely Sokoloff taylor & Zafman LLP
12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1026

ART UNIT	PAPER NUMBER
2136	1 2

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.		Applicant(s)	
Office Action Summary	09/491,459		KILCOMMONS, PETER M.	
	Examiner		Art Unit	
	Ali M. Mashaal		2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 March 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-50 and 52-64* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *50 and 54-65* is/are allowed.

6)☒ Claim(s) *1-8,10-50,52 and 53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

REMARKS

1)   This action is in response to communication filed on 03/08/2004.

2)   Of the original claims 1-51, claims 1-8 and 10-50 are still pending.

     Claims 9 and 51 were cancelled.

     Added claims 52-64 are pending.

3)   The specification and drawings as amended are no longer objected to.

4)   The claims as amended overcome the objections set forth in the previous office

action, as well as the 112 rejection, and therefore in this respect are acceptable.

Response to Arguments

5)   Applicant's arguments filed 08 March, 2004 have been fully considered by the

office but they are not persuasive for the following reasons:

5.1)   With respect to claims 1 and 21, applicant has amended the claims to further

include that the address which is attached to the packets for identifying the disassembly

structure is based upon AE titles. The applicant now argues that the amended claims 1

and 21 have a feature not taught or suggested by the Wood-Kirby-Kohn combination.

In particular, applicant argues that Wood does not teach encryption, a disassembly

structure, and a receiving station. Furthermore applicant argues that for Kirby to be

used as relevant prior art it must be the case (at least) that the address for computer 18

(in Kirby) is related to the address of computer 54. Applicant argues that this is

apparently not the case. Applicant also mentions that analogous art issues with respect to Kirby may not have been addressed. Examiner respectfully disagrees, refuting the argument as follows.

As previously detailed in the last office action, examiner cited Kirby as teaching encryption, disassembly structure, and a receiving station, not Wood. Furthermore, examiner combined these references with an explained motivation. Therefore the references in combination teach these limitations of the claims. With respect to applicant's argument that for Kirby to be used as relevant prior art it must be the case (at least) that the address for computer 18 (in Kirby) is related to the address of computer 54, examiner disagrees with applicant as to the claim that this relationship does not exist. According to Kirby, col. 1, lines 30-41, firewall computer 18 receives data from internal computer 54 destined to computer 56, prepends both addresses to the data packets as well as its own address and a destination computers address which may be a firewall. With regards to applicants concern regarding analogous art with respect to Kirby, examiner maintains that the Kirby disclosure is in fact analogous art because it deals with (and teaches a method for) encryption of data in packets on an internal network in order to be sent via a VPN to another internal network. The fact that Kirby alone does not disclose each and every element of the claims does not disqualify it from being analogous. Furthermore the combination of the 3 references does teach the elements of applicant's claimed invention. As to the added limitations to the claims (1 and 21 as amended) of the address which is attached to the packets for identifying the disassembly structure being based upon AE titles, examiner maintains the argument

that Kohn suggests AE titles, and the combination to include Kohn would yield the use

of AE titles in connection with the disassembly structure as taught by Kirby.

5.2)   With respect to claim 10, applicant argues that Benjamin et al. (Benjamin) was

misinterpreted by the examiner. Examiner respectfully argues that the Benjamin

reference was in fact interpreted correctly because, all though the columns and lines to

which the examiner directed applicant in the previous office action mentioned that the

GW-SSCP provide translation which translates alias names to real names, examiner

would like to further direct the applicant to col. 4, lines 40-55, in which it is disclosed that

networks A and B both include an SSCP, and so the process of translation is reversed

in the corresponding network (real name to alias), and therefore reads onto the claimed

invention. With regards to the analogy between Benjamin and the applicants claimed

invention, examiner argues that they are analogous because they both involve the

transmission of encrypted data packets over a public network. See Benjamin title.

5.3)   Applicant argues with respect to independent claims 29 and 39 that because of

the arguments set forth by the applicant with respect to claims 1 and 21 which attempt

to disqualify examiners cited references as prior, claims 29 and 39 rejection is

overcome. Examiner respectfully argues that because examiner maintains the rejection

of claims 1 and 21, claims 29 and 39 are not patentable over the prior art set forth in the

previous office action.

5.4)   As to the patentability of claim 50, see below under allowable subject matter.

5.5)   As to the newly added claims 52 (incorrectly referred to by applicant as independent claim 53), 54 (incorrectly referred to by applicant as independent claim 55), and claims 55-64, see below.

Claim Objections

Claim 29 is objected to because of the following informalities: On the 2nd line of the claim, the word "of" is repeated twice consecutively and erroneously. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12, 13, and 24-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites on the 4th-5th lines "the disassembly structure one of the disassembly structures" which apparently is a mistake making the claim ambiguous. Appropriate correction is required.

Claim 13 depends from claim 12, rendering it also ambiguous.

Claim 24 recites on the 2nd -3rd lines "coupled to medical transmitted via the

network" which apparently is a mistake making the claim ambiguous.

Claims 25-28 depend from claim 24 rendering them also ambiguous.

Claim Rejections - 35 USC § 103

6)   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.1)   Claims 29-33, and 39-44, are still rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent No. 5715823 to Wood in view of US Patent No. 5898784

to Kirby.

As per claim 39, Wood is directed to the use of the Internet to transmit medical

data such as ultrasound images and reports over the Internet, see column 1, lines 40-64

and figure 1 and figure 2, elements 46 and 48, as well as accompanying description.

Thus, Wood discloses medical information transmitted over a public network. Wood

differs from the claimed invention in that no discussion of packet assembly, addressing,

encryption, or disassembly is explicitly disclosed.

However, Kirby, in an analogous art, adequately discloses a virtual private networking method to transfer data including assembling data into packets as is understood by column 1 lines 52-column 2, line 3. Examiner respectfully asserts that in order to pass the encrypted packets in Kirby's invention, the data being transferred must first be formed into packets.

As per attaching an address to the packets for identifying a disassembly structure, see column 4 lines 22-29, computer 18 of the destination functions as the disassembly structure as it decrypts and disassembles the encryption of element 90 of figure 3, and encrypting said packets, see computer 16 in figure 3, for decryption by the disassembly structure see column 4, lines 30-47.

As per the packets being encrypted across protocol layers, Kirby discloses encryption of an encapsulated packet; see figure 4, elements 74, and 88, and its accompanying description. Furthermore, the examiner again notes that at the destination, computer 18 includes decryption unit 90. Packets are sent across a public network, see column 2, lines 24-27.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

As per claim 29, it is still rejected on the same basis as claim 39 above.

As per claim 30, Wood differs from the claimed invention in that he does not explicitly disclose authentication of the packets across protocol layers. Kirby, in an analogous art, adequately discloses authentication of the packets across protocol layers, see column 4, lines 55-63. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

As per claim 31, Wood differs from the claimed invention in that he does not explicitly disclose key management across protocol layers. Kirby, in analogous art, adequately discloses key management across protocol layers at the firewall computers, see column 5 lines 4-11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

As per claims 32, and 41, Wood differs from the claimed invention in that he does not explicitly disclose the use of IPSec. However, Kirby in analogous art, adequately discloses the use of RSA security algorithms. Examiner asserts that IPSec standards are implemented in RSA algorithms. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

As per claim 33, Wood differs from the claimed invention in that he does not explicitly disclose key management across protocol layers, authentication of the packets across protocol layers, and the use of RSA security algorithms. However, Kirby in analogous art, adequately discloses key management across protocol layers at the firewall computers, see column 5 lines 4-11, authentication of the packets across protocol layers, see column 4, lines 55-63, the use of RSA security algorithms, col.4, lines 43-47. Examiner asserts that IPSec standards are implemented in RSA algorithms. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's

invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

As per claim 40, Wood discloses the use of compression algorithms such as the JPEG standard to transmit images quickly in a compressed format without any data loss, see col. 10, lines 5-9.

As per claim 42, Wood differs from the claimed invention in that he does not explicitly disclose encryption of an encapsulated packet. However, Kirby in analogous art, adequately discloses encryption of an encapsulated packet; see figure 4, elements 74, and 88, and its accompanying description. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

As per claim 43, Wood differs from the claimed invention in that he does not explicitly disclose encapsulation and encryption wherein the outer packet includes an encryption field. However, Kirby in an analogous art, adequately discloses encapsulation and encryption wherein the outer packet includes an encryption field.

See column 4, lines 30-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of Kirby's system of transmitting encrypted packets across the Internet to transport the medical information in Woods medical transmission system. One would have been motivated to do so because Kirby's invention provides a detailed method for handling network packets that one would need to implement Woods invention. Also Kirby's invention provides security for the information being transmitted, and medical information is known to be confidential.

6.2)

Claims 47, and 48 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Kirby, and further in view of US Patent No. 4712214 to Meltzer.

As per claim 47, the Wood-Kirby combination teaches assembling medical data files into packets and sending them into a public network for receipt at a disassembly structure, as discussed above. The Wood-Kirby combination fails to explicitly disclose considering whether an acknowledgement of completed packet transfer is received within a threshold time, and resending only that portion of the data file to which no acknowledgement is received within the threshold. Meltzer, in an analogous art, adequately discloses considering whether an acknowledgement of completed packet transfer is received within a threshold time, and resending only that portion of the data file to which no acknowledgement is received within the threshold, see col. 2, lines 3-36.

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to implement packet acknowledgement on the Wood-Kirby

combination, using a threshold time and resending only the portion of the data that was

not correctly received. One would have been motivated to do so because this would

provide faster and more efficient transmission.

As per claim 48, examiner asserts that it is well known in the art that varying the

packet size effects the efficiency and speed as well as the reliability of the network data

transmission. (For example, see Shaffer col. Lines 31-42).

6.3)

Claims 35, 38, and 45, are still rejected under 35 U.S.C. 103(a) as being

unpatentable over Wood in view of to Kirby, as applied to claims 29, 36, and 39 above,

and further in view of Benjamin.

As per claim 35, the Wood-Kirby combination adequately discloses a system,

wherein the address is a routable IP address, see Kirby col. 2, lines 19-27, and 59-64

where he discloses that the internal computer transmits packets to the network interface

computer which is connected to a public network, and where the network interface

computer sends the packets over the internet. This means the address attached to the

packets must be routable IP addresses. The Wood-Kirby does not explicitly disclose

cross-referencing from a relational database the private IPs with the routable IPs that

identifies a disassembly structure associated with the receiving station, and attaching

the IP address to the packets. Benjamin, in an analogous art, adequately discloses

accepting addresses that identify a receiving station see column 2 line 60-column 3 line 2, and cross-references the addresses to routable addresses that identify the receiving disassembly structure, see column 2, lines 50-comlumn 3, line 8. Examiner respectfully asserts that relational databases are a well-known method for correlating data. It would have been obvious to one having ordinary skill in the art at the time the invention was made to take the given destination address of the packets in the Wood-Kirby combination and use a relational database to cross-reference those addresses with a routable address of the destination network interface computer as taught by Benjamin. One would have been motivated to do so because by using routable IPs only on network interface computers, and nonroutable IPs on internal computers, the structure and internal addresses of sub-networks of an interconnected network will not be unnecessarily exposed.

As per claims 38 and 45, they are still rejected on the same basis as 35 discussed above.

6.4)   Claims 1-7, 15, 16, 19-21, 34, 36, 37, 44, and 49 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Kirby, as applied to claims 29, 36, and 39 above, and further in view of Kohn.

As per claim 1, The Wood-Kirby combination discloses all limitation of claim 1 as discussed above in the rejection of claim 39. The Wood-Kirby combination does not explicitly disclose a data interface for acquiring a medical data file having an application entity title. However, Kohn in an analogous art, teaches the acquisition of medical

digital images and data sources using a server linked to a modality via a network, and

accessing the data through industry standards such as DICOM, see page 5, lines 5-10.

Examiner asserts that in order to network the medical modality to the server a data

interface such as an Ethernet port or USB port must exist between the two devices.

Examiner further asserts that the deployment of DICOM standards by the modality

constitutes appending application entity titles to the data. This data, according to the

teachings of the Wood-Kirby combination is encapsulated with a new header so that the

data is remapped to the disassembly structure prior to it reaching its final destination,

see Kirby, Col. 4, lines 22-29. Therefore, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify the medical data

transmission system of Wood-Kirby such that it deployed a server or other device

networked to various medical modalities for acquiring the medical data using DICOM

standards, which would append AE titles which would then be remapped. One would

have been motivated to make this modification because using an industry standard

such as DICOM would facilitate the use of the data over the Internet and allow easy,

time-efficient access, see Kohn, page 4, lines 1-6. Also this modification would enable

medical data to be transferred with full diagnostic quality, page 5, lines 7-9.

As per claim 21, Kirby teaches the use of a virtual private network, see column 1,

lines 42-55, and column 8, lines 37-42.

As per claim 7, Kirby's transmitter is also a firewall, see figure 2, elements 16 and

18, and figure 11, element 192.

As per claim 2, Kirby discloses authentication of the packets, see column 4, lines 55-63.

As per claim 3, Kirby discloses key management layers at the firewall computers, see column 5 lines 4-11.

As per claim 4, Kirby discloses the use of RSA security algorithms, col.4, lines 43-47. Examiner asserts that IPSec standards are implemented in RSA algorithms.

As per claim 5, Kirby discloses key management across protocol layers at the firewall computers, see column 5 lines 4-11, authentication of the packets across protocol layers, see column 4, lines 55-63, the use of RSA security algorithms, col.4, lines 43-47. Examiner asserts that IPSec standards are implemented in RSA algorithms.

As per claim 6, Kirby discloses encryption of an encapsulated packet, see figure 4, elements 74, and 88, and its accompanying description.

As per claims 15 and 16, examiner asserts that it is well-known in the art that varying the packet size effects the efficiency and speed as well as the reliability of the network data transmission. (For example, see Shaffer col. Lines 31-42).

As per claim 19, Wood discloses a medical transmission system that transmits ultrasound, see figure 2 and accompanying description.

As per claim 20, the Wood-Kirby combination adequately discloses all limitations of claim 19 as discussed above which claim 20 depends on. The Wood-Kirby combination fails to explicitly disclose accessing the data through DICOM and/or HL7 standards. However, Kohn in analogous art, adequately teaches accessing the data

through DICOM and/or HL7 standards, see page 5, lines 5-10. Therefore, it would have

been obvious to one having ordinary skill in the art at the time the invention was made

to modify the medical data transmission system of Wood-Kirby such that it deployed a

server or other device networked to various medical modalities for acquiring the medical

data using DICOM standards. One would have been motivated to make this

modification because using an industry standard such as DICOM would facilitate the

use of the data over the Internet and allow easy, time-efficient access, see Kohn, page

4, lines 1-6. Also this modification would enable medical data to be transferred with full

diagnostic quality, page 5, lines 7-9.

As per claims 36 and 46, converting the medical data to be compliant with

DICOM standards whether it is before or after the packets are received does not effect

the invention, since in either case it is transparent to the receiving entity at the final

destination. Therefore these claims are rejected on the same basis as claim 20.

6.5)   Claim 11 is still rejected under 35 U.S.C. 103(a) as being unpatentable over

Wood in view of to Kirby, as applied to claim 1 above, and further in view of Benjamin.

The Wood-Kirby-Kohn combination adequately discloses the system, wherein the

address is a routable IP address, see Kirby col. 2, lines 19-27, and 59-64 where he

discloses that the internal computer transmits packets to the network interface computer

which is connected to a public network, and where the network interface computer

sends the packets over the internet. This means the address attached to the packets

must be routable IP addresses. The Wood-Kirby does not explicitly disclose cross-

referencing from a relational database the private IPs with the routable IPs that

identifies a disassembly structure associated with the receiving station, and attaching

the IP address to the packets. Benjamin, in an analogous art, adequately discloses

accepting addresses that identify a receiving station see column 2 line 60-column 3 line

2, and cross-references the addresses to routable addresses that identify the receiving

disassembly structure, see column 2, lines 50-comlumn 3, line 8. Examiner respectfully

asserts that relational databases are a well-known method for correlating data. It would

have been obvious to one having ordinary skill in the art at the time the invention was

made to take the given destination address of the packets in the Wood-Kirby

combination and use a relational database to cross-reference those addresses with a

routable address of the destination network interface computer as taught by Benjamin.

One would have been motivated to do so because by using routable IPs only on

network interface computers, and nonroutable IPs on internal computers, the structure

and internal addresses of sub-networks of an interconnected network will not be

unnecessarily exposed.

6.6)　　Claims 17, and 18 are still rejected under 35 U.S.C. 103(a) as being

unpatentable over Wood in view of Kirby in view of Kohn and further in view of US

Patent No. 4712214 to Meltzer.

As per claim 17, the Wood-Kirby-Kohn combination fails to explicitly disclose an

acknowledgement unit configured to receive confirmation of completed packet transfer

from a disassembly structure within a threshold time. Meltzer, in an analogous art,

adequately discloses an acknowledgement unit configured to receive confirmation of completed packet transfer from a disassembly structure, see col. 2, lines 25-28.

As per claim 18, the acknowledgement unit causes the retransmission of the packets by sending a negative acknowledgment upon not receiving the packet within the threshold time see col. 2, lines 3-36.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement packet acknowledgement on the Wood-Kirby-Kohn combination, using a threshold time and resending only the portion of the data that was not correctly received. One would have been motivated to do so because this would provide faster and more efficient transmission.

6.7)   Claims 10, 34, 37, 44, 49, and 50 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Kirby in view of Kohn, as applied to claims 1, and 21 above, and further in view of US Patent No. 4677588 to Benjamin.

As per claim 10, the Wood-Kirby-Kohn combination discloses the use of alias titles attached to the packets by accepting an AE title that identifies a receiving station as per DICOM standards. The Wood-Kirby-Kohn combination does not explicitly disclose cross-referencing from a relational database the AE title with the alias title that identifies a disassembly structure associated with the receiving station, and attaching the alias AE title to the packets. Benjamin, in an analogous art, adequately discloses accepting addresses that identify a receiving station see column 2 line 60-column 3 line 2, and cross-references the addresses to alias address that identify the receiving

disassembly structure, see column 3, lines 2-20. Examiner respectfully asserts that

relational databases are a well-known method for correlating data. It would have been

obvious to one having ordinary skill in the art at the time the invention was made to take

the given destination address of the packets (provided by the AE title) in the Wood-

Kirby-Kohn combination and use a relational database to cross-reference those

addresses with an alias address of the destination network interface computer as taught

by Benjamin. One would have been motivated to do so because by using alias names,

the sub-networks of an interconnected network can use common names, which

enhances the individuality of each subnetwork, see Benjamin, col. 3, lines 16-20.

Claims 34, 37, 44, and 50, are still rejected on the same basis as claim 10

discussed above.

6.9)   Claims 14, 22 and 23 are still rejected under 35 U.S.C. 103(a) as being

unpatentable over Wood in view of Kirby in view of Kohn, as applied to claim 21 above,

and further in view of Peifer.

As per claim 14, the Wood-Kirby-Kohn combination adequately discloses all

limitations of claim 1 which claim 14 depends from. The Wood-Kirby-Kohn combination

does not explicitly disclose that the data can be over multiple combinations of network

architectures. Peifer, in an analogous art, adequately discloses that the data can be

over multiple combinations of network architectures, see col. 3, lines 40-44. It would

have been obvious to one having ordinary skill in the art at the time the invention was

made to take the Wood-Kirby-Kohn combination and apply Peifer's suggestion of

multiple combinations of network architectures. One would have been motivated to do

so because by having multiple combinations of network architectures, the system would

be more compatible, and wider used, which one would have wanted to implement

because the system uses the Internet.

As per claim 22, the Wood-Kirby-Kohn combination adequately discloses all

limitations of claim 21 which claim 22 depends from. The Wood-Kirby-Kohn combination

further discloses a system comprising radiography equipment, see Kohn page 5, 5th

paragraph.

As per claim 23, the Wood-Kirby-Kohn combination adequately discloses all

limitations of claim 21 which claim 23 depends from. The Wood-Kirby-Kohn

combination does not explicitly disclose that the network system comprises a plurality of

medical modalities. However, Peifer in analogous art, adequately discloses that the

network system comprises a plurality of medical modalities. See figure 2, elements 28-

30, and accompanying description. Therefore it would have been obvious to one having

ordinary skill in the art at the time the invention was made to use a radiology modality in

the network system, and to use a plurality of modalities. One would have been

motivated to do so because the more medical devices the system could handle, and the

greater the variety, the more widely used and standardized the invention would be.

6.10) Claim 8 is still rejected under 35 U.S.C. 103(a) as being unpatentable over Wood

in view of Kirby in view of Kohn as applied to 1 and 7 above, and further in view of

Kohn. The Wood-Kirby-Kohn combination, as applied above to claims 1 and 7

discloses all limitations of claim 7. The Wood-Kirby-Kohn combination, as applied above to claims 1 and 7 fails to explicitly disclose a first network port at the data interface and a second network port at the network interface. However, Kohn further discloses a server linked directly to a medical modality as well as to a network see page 5, lines 5-10. Examiner first asserts that in order to connect the medical modality to the server and also put the server on the network, there must be at least two network ports, namely one being at the data interface to receive the data from the medical modality and another at the network interface to connect the server to the remaining nodes on the network in order to transmit the data. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make use of the idea of connecting the transmitting server of Kohn directly to the medical modality as well as the Internet using two network ports, and applying it to the firewall transmitter it in the Wood-Kirby-Kohn combination. One would have been motivated to do so because there is a need to get the data from the medical modality to the firewall, and there is a need to get the data onto the Internet, and in both cases there is no need for an intermediary device.

6.11) Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood in view of Kirby, and further in view of US Patent No. 4,617,657 TO Drynan et al. (Drynan).

As per claim 52, the Wood-Kirby combination teaches assembling medical data files into packets and sending them into a public network for receipt at a disassembly

structure, as discussed above. The Wood-Kirby combination fails to explicitly disclose considering whether an acknowledgement of completed packet transfer is received within a threshold time, and resending only that portion of the data file to which no acknowledgement is received within the threshold. Drynan, in an analogous art, adequately discloses considering whether an acknowledgement of completed packet transfer is received within a threshold time, and resending only that portion of the data file to which no acknowledgement is received within the threshold, see col. 9, lines 28-42. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement packet acknowledgement on the Wood-Kirby combination, using a threshold time and resending only the portion of the data that was not correctly received. One would have been motivated to do so because this would provide faster and more efficient transmission.

As per claim 53, examiner asserts that it is well known in the art that varying the packet size effects the efficiency and speed as well as the reliability of the network data transmission. (For example, see Shaffer col. Lines 31-42).

Allowable Subject Matter

7.1)   Claim 50 as amended is allowed. The reasons for allowance of this claim are clear from the record.

7.2)   Claim 54-65 are allowable.

Conclusion

8.1)   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. The following patent has been cited as prior art over a newly

added claim: US Patent No. 4,617,657.

8.2)   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

8.3)   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ali M. Mashaal whose telephone number is 703-305-

7854. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

8.4)   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AM

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100